

# HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

1A07 Doc'd PCT/PTO 20 JAN 2006

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

3194.1019-009

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**10/565353**

EARLIEST PRIORITY DATE CLAIMED  
21 July 2003 (21.07.2003)

INTERNATIONAL APPLICATION NO.  
PCT/US2004/023491

INTERNATIONAL FILING DATE  
21 July 2004 (21.07.2004)

**TITLE OF INVENTION**

Hydride Gas Purification for the Semiconductor Industry

**APPLICANT(S) FOR DO/EO/US**

Daniel Alvarez, Jr., Jeffrey J. Spiegelman, Joshua T. Cook, Tram Doan Nguyen, Daniel A. Lev and Troy B. Scoggins

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1.  This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2.  This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3.  This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4.  The US has been elected (Article 31).
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto (required only if not communicated by the International Bureau).
  - b.  has been communicated by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US).
6.  An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto.
  - b.  has been previously submitted under 35 U.S.C. 154(d)(4).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are attached hereto (required only if not communicated by the International Bureau).
  - b.  have been communicated by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (Except for Spiegelman.)
10.  An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98 (3 pgs.) w/PTO Form 1449 (2 pgs.) w/reference & copy of International Search Report.
12.  An assignment document for recording. Except for Spiegelman. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13.  A preliminary amendment (3 pgs.).
14.  An Application Data Sheet under 37 CFR 1.76.
15.  A substitute specification.
16.  A power of attorney and/or change of address letter.
17.  A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
18.  A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19.  A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20.  Other items or information:

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/565353</b>	INTERNATIONAL APPLICATION NO. PCT/US2004/023491	ATTORNEY'S DOCKET NUMBER 3194.1019-009	
The following fees have been submitted		CALCULATIONS PTO USE ONLY	
21. [ x ] Basic national fee (37 CFR 1.492(a)) . . . . . \$300		\$300	
22. [ x ] Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) . . . . . \$0 All other situations . . . . . \$200		\$200	
23. [ x ] Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) . . . . . \$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority. . . . . \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB. . . . . \$400 All other situations. . . . . \$500		\$400	
<b>TOTAL OF 21, 22 and 23 =</b>		\$900	
[ ] Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.			
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE
32 - 100 =	0 /50 =		x \$250
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).		\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	21 - 20 =	1	x \$50
Independent claims	2 - 3 =	0	x \$200
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$360	\$
<b>TOTAL OF ABOVE CALCULATIONS</b>		\$950	
[ ] Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.		\$	
<b>SUBTOTAL</b>		\$950	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).		+	\$
<b>TOTAL NATIONAL FEE</b>		\$950	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property		+	\$40
<b>TOTAL FEES ENCLOSED</b>		\$990	
		Amount to be refunded:	\$
		Amount to be charged:	\$

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/565353</b>	INTERNATIONAL APPLICATION NO. PCT/US2004/023491	ATTORNEY'S DOCKET NUMBER 3194.1019-009
---	--	---

- a.  A check in the amount of \$990 to cover the above fees is enclosed.
- b.  Please charge my Deposit Account No. 08-0380 in the amount of \$[ ] to cover the above fees. A duplicate copy of this sheet is enclosed.
- c.  The Commissioner is hereby authorized to charge any deficiency or credit any overpayment in the fees that may be due in this matter to Deposit Account No. 08-0380. A duplicate copy of this sheet is enclosed.

**NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.**

SEND ALL CORRESPONDENCE TO:

Alice O. Carroll, Esq.  
Customer No. 021005  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
530 Virginia Road  
P.O. Box 9133  
Concord, MA 01742-9133

  
\_\_\_\_\_  
SIGNATURE

Alice O. Carroll  
\_\_\_\_\_  
NAME

33,542  
\_\_\_\_\_  
REGISTRATION NUMBER

IN THE UNITED STATES RECEIVING OFFICE (RO/US)  
Designated/Elected Office (DO/EO/US)

U.S. National Stage of

International Application No.: PCT/US2004/023491

International Filing Date: 21 July 2004

Earliest Priority Date Claimed: 21 July 2003

Applicants: Daniel Alvarez, Jr., Jeffrey J. Spiegelman,  
Joshua T. Cook, Tram Doan Nguyen, Daniel A. Lev  
and Troy B. Scoggins

Title: HYDRIDE GAS PURIFICATION FOR THE  
SEMICONDUCTOR INDUSTRY

Attorney's Docket No.: 3194.1019-009

Date: 20 JANUARY 2006

EXPRESS MAIL LABEL NO. EV214886855US